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FIG. 1

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34

36

```
RANDOM
NUMBER
GENERATOR
GENERATES 1ST
KEY
```

38

```
LOCKING ROUTINE GENERATES
GATEKEEPER JAVA APPLICATION
TO BE COMPILED WITH
APPLICATION SOURCE CODE
```

40

```
LOCKING ROUTINE DETERMINES
CHARACTERISTIC PARAMETER OF
THE DATA FILE(S)
```

42

```
LOCKING ROUTINE GENERATES
2ND KEY BASED ON 1ST KEY AND
CHARACTERISTIC PARAMETER OF
THE DATA FILE(S)
```

44

```
LOCKING ROUTINE
INCORPORATES 2ND KEY INTO
HEADER OF THE DATA FILE(S)
```

46

```
COMPILER COMPILES
APPLICATION SOURCE CODE TO
INCLUDE (1) THE FIRST KEY AND
(2) THE GATEKEEPER JAVA
APPLICATION
```

48

```
SUPPLY COMPILED APPLICATION
OBJECT CODE AND DATA FILE(S)
WITH 2ND KEY IN HEADER TO
USER
```

50

(END)

FIG. 2

Inventor: Colleen A. Barton et al.
Title: Method and Logic for Capturing and Analyzing Conduit Data
Serial No.: 09/657,759; Filed: September 8, 2000; Confirmation No.: 2732
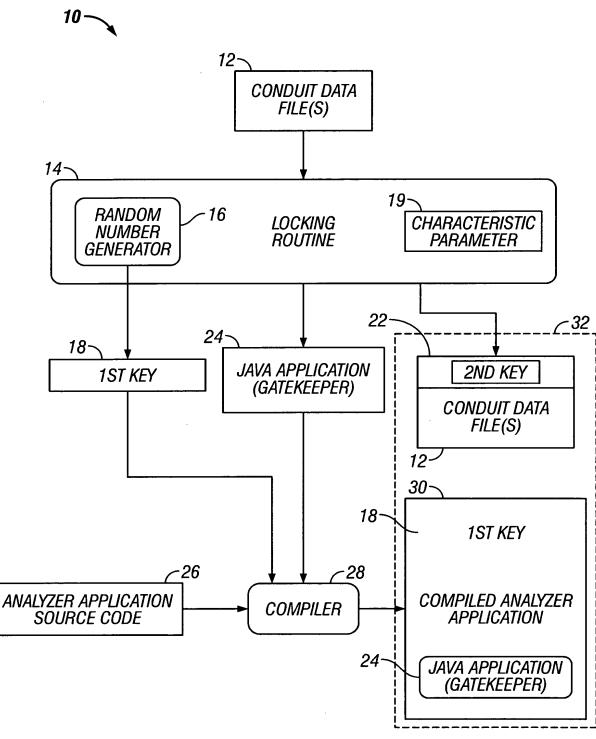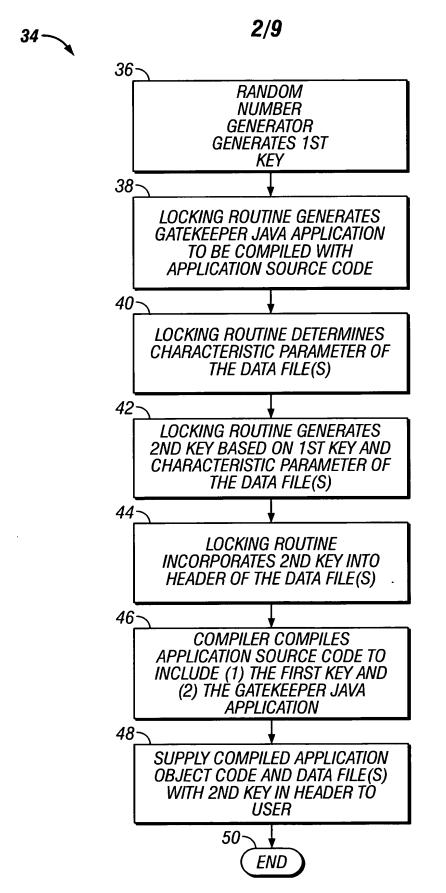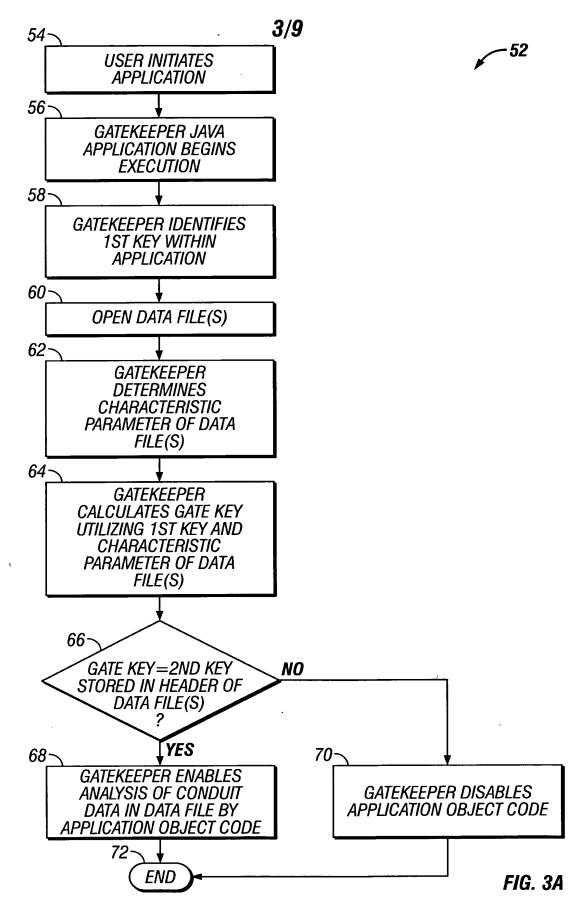Docket No.: GMI-1001CP; REPLACEMENT SHEET

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54 — USER INITIATES APPLICATION

↓

56 — GATEKEEPER JAVA APPLICATION BEGINS EXECUTION

↓

58 — GATEKEEPER IDENTIFIES 1ST KEY WITHIN APPLICATION

↓

60 — OPEN DATA FILE(S)

↓

62 — GATEKEEPER DETERMINES CHARACTERISTIC PARAMETER OF DATA FILE(S)

↓

64 — GATEKEEPER CALCULATES GATE KEY UTILIZING 1ST KEY AND CHARACTERISTIC PARAMETER OF DATA FILE(S)

↓

66 — GATE KEY=2ND KEY STORED IN HEADER OF DATA FILE(S) ? — **NO** → 70 — GATEKEEPER DISABLES APPLICATION OBJECT CODE

YES

↓

68 — GATEKEEPER ENABLES ANALYSIS OF CONDUIT DATA IN DATA FILE BY APPLICATION OBJECT CODE

↓

72 — END

— 52

FIG. 3A

Inventor: Colleen A. Barton et al.
Title: Method and Logic for Capturing and Analyzing Conduit Data
Serial No.: 09/657,759; Filed: September 8, 2000; Confirmation No.: 2732
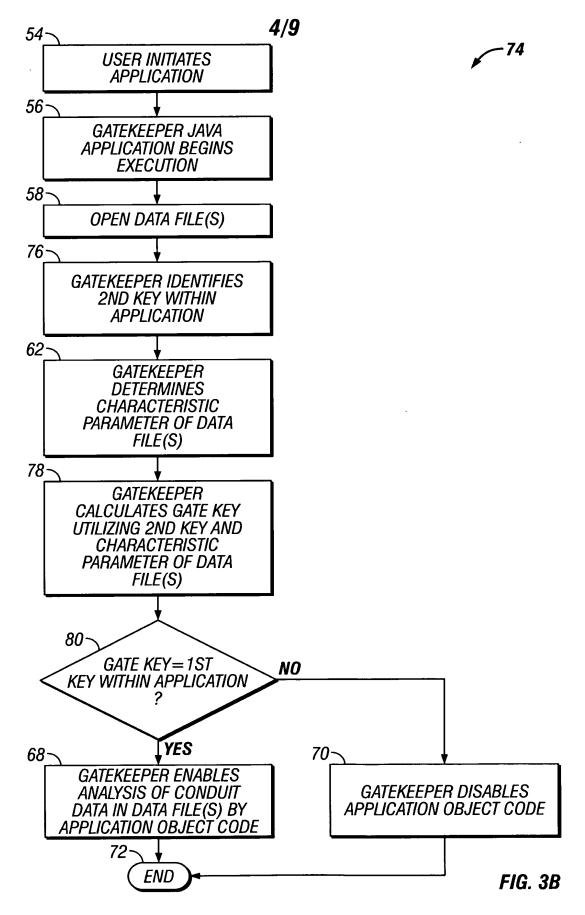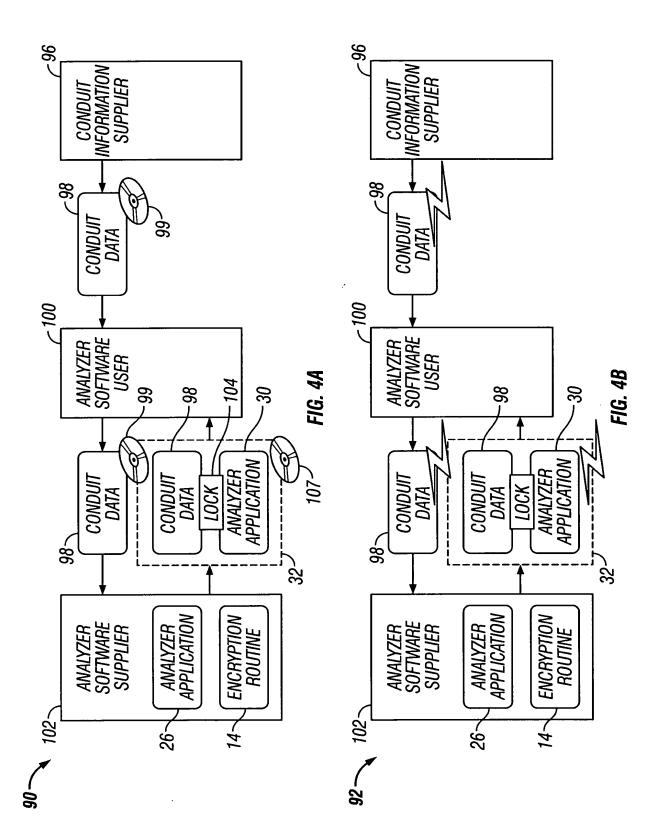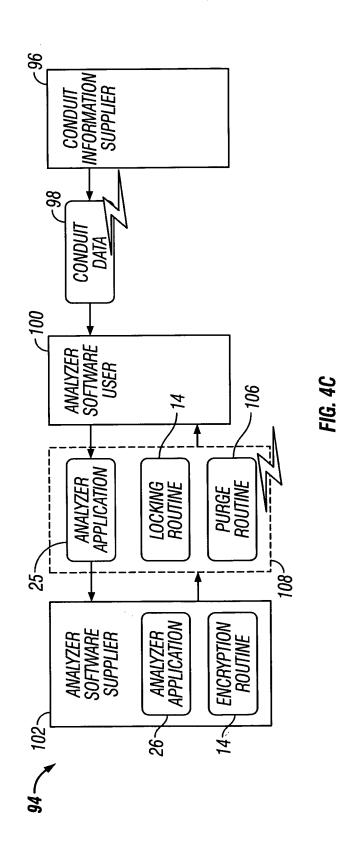Docket No.: GMI-1001CP; REPLACEMENT SHEET

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54 → USER INITIATES APPLICATION

56 → GATEKEEPER JAVA APPLICATION BEGINS EXECUTION

58 → OPEN DATA FILE(S)

76 → GATEKEEPER IDENTIFIES 2ND KEY WITHIN APPLICATION

62 → GATEKEEPER DETERMINES CHARACTERISTIC PARAMETER OF DATA FILE(S)

78 → GATEKEEPER CALCULATES GATE KEY UTILIZING 2ND KEY AND CHARACTERISTIC PARAMETER OF DATA FILE(S)

80 → GATE KEY=1ST KEY WITHIN APPLICATION ?

NO

YES

68 → GATEKEEPER ENABLES ANALYSIS OF CONDUIT DATA IN DATA FILE(S) BY APPLICATION OBJECT CODE

70 → GATEKEEPER DISABLES APPLICATION OBJECT CODE

72 → END

74

FIG. 3B

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FIG. 4A

FIG. 4B

FIG. 4C

90

110 —
PROVIDE CONDUIT
DATA TO ANALYZER
SOFTWARE SUPPLIER

112 —
ANALYZER SOFTWARE
SUPPLIER LOCKS
ANALYZER APPLICATION
TO CONDUIT DATA

114 —
ANALYZER SOFTWARE
SUPPLIER SUPPLIES
LOCKED ANALYSIS
APPLICATION AND
CONDUIT DATA TO
ANALYZER SOFTWARE
USER

116 —
GATEKEEPER ALLOWS
USER TO EXECUTE
LOCKED SOFTWARE TO
ANALYZE CONDUIT
DATA

118 —
END

FIG. 5

94

120

ANALYZER SOFTWARE
USER ACQUIRES
CONDUIT DATA

122

ANALYZER SOFTWARE USER REQUESTS
ANALYZER APPLICATION, AND
LOCKING AND PURGE ROUTINES FROM
ANALYZER SOFTWARE SUPPLIER

124

ANALYZER SOFTWARE
SUPPLIER SUPPLIES
ANALYZER APPLICATION
AND LOCKING AND
PURGE ROUTINES TO
ANALYZER SOFTWARE
USER

126

ANALYZER SOFTWARE USER
EXECUTES LOCKING ROUTINE TO
LOCK ANALYZER SOFTWARE AND
CONDUIT DATA

128

LOCKING ROUTINE CALLS PURGE
ROUTINE TO PURGE LOCKING
ROUTINE FROM USER SYSTEM

130

GATEKEEPER ALLOWS
USER TO EXECUTE LOCKED
SOFTWARE TO ANALYZE
CONDUIT DATA

132

END

FIG. 6

Inventor: Colleen A. Barton et al.
Title: Method and Logic for Capturing and Analyzing Conduit Data
Serial No.: 09/657,759; Filed: September 8, 2000; Confirmation No.: 2732
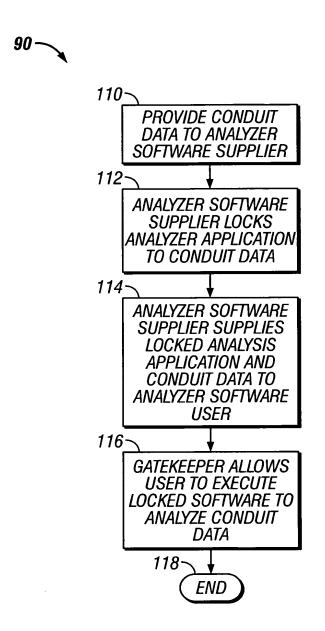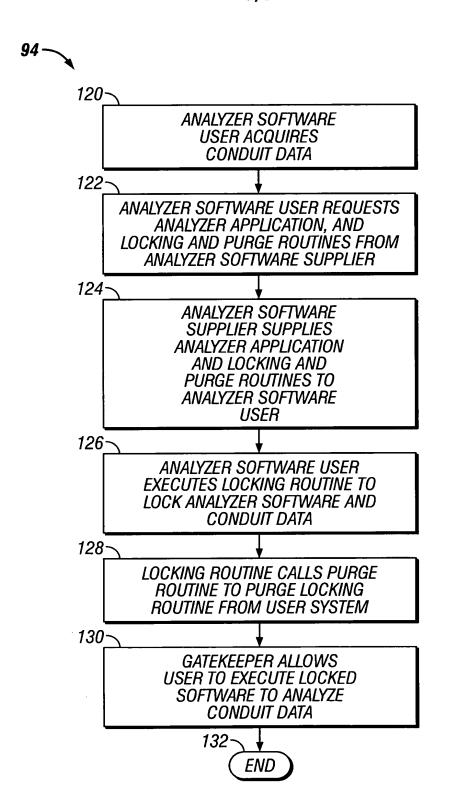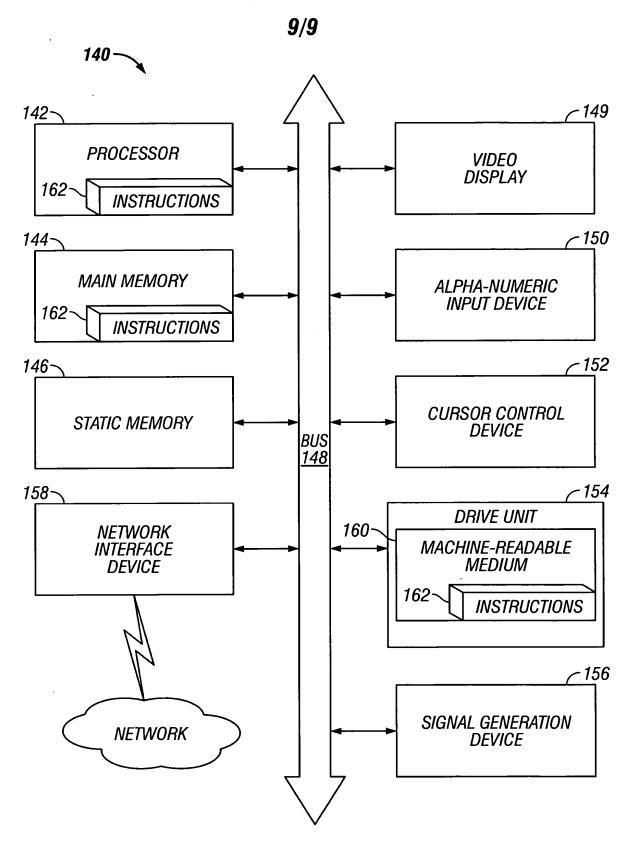Docket No.: GMI-1001CP; REPLACEMENT SHEET

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142
PROCESSOR
162 INSTRUCTIONS

144
MAIN MEMORY
162 INSTRUCTIONS

146
STATIC MEMORY

158
NETWORK INTERFACE DEVICE

NETWORK

BUS 148

149
VIDEO DISPLAY

150
ALPHA-NUMERIC INPUT DEVICE

152
CURSOR CONTROL DEVICE

154
DRIVE UNIT
160
MACHINE-READABLE MEDIUM
162 INSTRUCTIONS

156
SIGNAL GENERATION DEVICE

FIG. 7